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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,133	12/27/2000	Russell Mumper	NANO:002US	3309
32425 7590 09/04/2008 FULBRIGHT & JAWORSKI L.L.P. 600 CONGRESS AVE. SUITE 2400 AUSTIN, TX 78701				
EXAMINER				
AZPURU, CARLOS A				
ART UNIT		PAPER NUMBER		
1615				
MAIL DATE		DELIVERY MODE		
09/04/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/748,133

**Applicant(s)**

MUMPER ET AL

**Examiner**

Carlos A. Azpuru

**Art Unit**

1615

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-16 and 18-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-16, 18-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Receipt is acknowledged of the amendment filed 05/20/2008.

During the interview of 05/15/2008, applicant pointed out that the water-insoluble wmucoadhesive polymer was found in the backing layer and not the layer containing the bioactive. At the time it was agreed that the reference did not read on the instant claims. A review for allowability however found that while the reference does contain these polymers in another layer, the instant claims are open ended in the use of their "comprising" language, and do not limit the amount of layers found in the claimed device. Further the Biegajski et al composition is a gel despite the layering of the device. Therefore, the rejection over Biegajski et al is maintained in this action. The action however will not be made final in view of the Examiner's initial agreement with applicant's arguments.

Therefore, the rejection of the claims over Biegajski et al is maintained:

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-16, 18-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Biegajski et al (US 5,700,478) .

Biegajski et al discloses a mucoadhesive drug delivery device wherein the polymer contain the drug to be delivered (see Abstract, col. 35, line 30).Eudragit (polymethacrylate) copolymers (col. 22, line 15) and Carbopol 934 (col. 28, lines 40-45) are taught for use in the adhesive layer and are pH-sensitive. These polymers are crosslinked with polyalkenyl ether or divinyl glycol. Polymer weight percentages are taught at col. 8, line 50. The mucoadhesive layer may be a copolymer of methacrylic acid esters with diethylaminoethyl methacrylate (col. 33, line 55-60). The adherence of the drug delivery system to the mucosal site is set out at col. 5, line 25 to col. 6, line 30). A mint flavoring agent is found at col. 12, line 44. The instant claims are anticipated by Biegajski et al.

***Response to Arguments***

Applicant's arguments filed 05/20/2008 have been fully considered but they are not persuasive.

As noted above, applicant argues that Biegajski et al does not include each and every element of the instant claims because the mucoadhesive polymers of that reference are found in the backing layer. However, the invention of Biegajski et al is a gel with various layers. The instant claims are open ended in their use of the wording "comprising", and does not limit the layers possible in the invention. It is therefore suggested that applicant find support in the specification for excluding the invention of Biegajski et al by using the language "consisting of" as well as setting out that the components are found in the same layer (provided of course, that there is support for this amendment). For now, the rejection of the claims under 35 USC 103(a) over Biegajski et al is maintained in this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos A. Azpuru whose telephone number is (571) 272-0588. The examiner can normally be reached on Tu-Fri, 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carlos A. Azpuru/  
Primary Examiner, Art Unit 1615

Carlos A. Azpuru  
Primary Examiner  
Art Unit 1615

caz